

wise there is a great possibility of erroneous conclusions because an existing hyperglycemia may disappear. As a supplementary investigation the determination of the type of glycosuria may be carried out by determining the blood-sugar curve after the administration of a dose of glucose. American observers have emphasized the importance of the failure of the blood-sugar value to return to the normal level of about .12 per cent in the two-hour period following ingestion of 100 gm. of dextrose. This delay is seen regularly in disturbance of the carbohydrate utilization of the true diabetic type.

In the past decade, since the refinement of methods for the accurate clinical determination of the blood sugar in glycosuric patients, the idea concerning the prevalence of renal glycosuria has been considerably modified. Ten years ago it was regarded as a comparatively rare condition, but opinion has changed, and today it is known to be fairly common. In confirmation of this, J. E. Holst,<sup>4</sup> in an examination of 163 applicants, who by life insurance companies were declared to be diabetics on account of glycosuria, was able to demonstrate the frequency of the benign type of glycosuria. In only 30 per cent was true diabetes the underlying cause of sugar. In a series of twenty-seven cases of benign glycosuria, which he observed for from one to twenty-five years, no sign of the development of diabetes was observed in a single instance. The importance of these facts to life insurance companies is obvious, and has been ably discussed recently by Dr. Francis H. McCrudden of the New England Mutual Life Insurance Company. With reference to medical selection in sugar cases, McCrudden<sup>5 6</sup> concludes as follows: "The doubtful glycosuria cases are given an opportunity to submit to the blood-sugar tolerance test. In this test 100 grams of dextrose in 40 per cent aqueous solution is administered by mouth, and two hours later the sugar content of the blood is determined. If the blood sugar content at this time is .120 per cent, or less, we consider that the glycogenetic function has demonstrated its ability to stand a good load with normal response. If there is no other impairment we accept them for standard insurance."

ERNEST S. DU BRAY, San Francisco.

#### REFERENCES

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4. Faber, K., and Norgaard, A.: Studies on the Threshold for Glycosuria, *Acta, Med. Scandinav.*, Vol. 53, p. 670, 1921.
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Slight Glycosuria, published by the New England Mutual Life Insurance Company, Boston, 1925.

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#### Bacteriology

**A Necrotizing Toxin from Pneumococcus.**—Therapeutic antisera have been generally unsuccessful except in those infections in which a strong microbic toxin can be obtained as the immunizing agent. The recent production of a powerful necrotizing toxin from the pneumococcus by the application of improved technical methods is, therefore, of general interest.

Parker<sup>1</sup> found that if a virulent, first-generation broth culture of pneumococcus is chilled, centrifuged, the sediment taken up in an equal volume of chilled, freshly boiled broth and immediately sealed free from all air bubbles, the sealed tubes give rise to a powerful necrotizing toxin if kept in the dark, at room temperature, for six to eight days. The preparation must be ice-cold when exposed to air, otherwise its toxicity rapidly disappears. Parker found that this toxin can be passed through a Berkefeld filter, if every precaution is taken to have the filter and receptacles at freezing temperature. She reports that 0.1 cc. of the filtrate injected intradermally into a guinea-pig will produce a necrotic area an inch in diameter.

W. H. MANWARING, Stanford University.

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Recovery Chances in Infantile Paralysis.—Definite case history evidence that infantile paralysis may be checked with little or no permanent impairment of patients, providing that treatment by intramuscular injection of convalescent serum is given within forty-eight hours after first symptoms of the disease, has just been collected by Dr. E. B. Shaw and Dr. H. E. Thelander, instructor and voluntary assistant respectively in the department of pediatrics of the University of California Medical School.

The points which they list in concluding the report are as follows: Convalescent serum administered intramuscularly is of distinct value in the treatment of poliomyelitis. The effectiveness of such treatment depends on early diagnosis and treatment, with sufficiently large, and if necessary, repeated doses of potent serum. The method, on account of its ease, safety and simplicity, may be applied in the doubtful case without waiting for confirmatory evidence, and is particularly apt to provide treatment in the early stages when much may be expected as a result of treatment. It is extremely desirable that stores of pooled convalescent serum be made available for general use and particularly that such stores be on hand prior to the outbreaks of actual epidemics.—*U. C. Clip Sheet.*